

WHAT IS CLAIMED IS:

1. A connector adapted to be mounted to a board, the connector comprising:

an insulating housing disposed on one surface of the board;

a conductive contact held by the housing, the contact having a contacting portion protruding from the housing towards a side opposite to the board; and

a conductive ground held by the housing and surrounding the contacting portion, the ground having a plurality of terminal portions protruding from the housing towards the board and arranged in a staggered pattern.

2. The connector according to claim 1, wherein the ground comprises a plurality of ground plates combined with one another in a lattice fashion, the terminal portions being formed on the ground plates.

3. The connector according to claim 1, wherein the board has a plurality of through holes, the terminal portions having press-fit portions press-fitted into the through holes, respectively.

4. A connector mounted on a board having a number of through holes, the connector comprising:

an insulating first housing disposed on one surface of the board;

an insulating second housing disposed on the other surface of the board opposite to the one surface;

a conductive contact inserted through the through holes, respectively, and held by the first and the second housings, the contact having first and second contacting portions which are formed at opposite ends of the contact and protrude from the first and the second housings, respectively;

a conductive first ground held by the first housing and surrounding the first contacting portion; and

a conductive second ground held by the second housing and surrounding the second contacting portion, the first ground having a plurality of terminal portions protruding from the first housing towards the board and arranged in a first staggered pattern, the second ground having a plurality of terminal portions protruding from the second housing towards the board and arranged in a second staggered pattern, the terminal portions being inserted into the through holes, respectively.

5. The connector according to claim 4, wherein each of the first and the second grounds has a plurality of ground plates combined with one another in a lattice fashion, the terminal portions being formed on the ground plates.

6. The connector according to claim 4, wherein the terminal portions have press-fit portions press-fitted into the through holes, respectively.

7. The connector according to claim 4, wherein the first ground has a spring portion contacted with the second ground.

8. The connector according to claim 7, wherein the second ground has a spring portion contacted with the first ground.

9. The connector according to claim 4, wherein the first ground has a plurality of escaping portions faced to the terminal portions of the second ground, respectively.

10. The connector according to claim 9, wherein the second ground has a plurality of escaping portions faced to the terminal portions of the first ground, respectively.

11. The connector according to claim 4, wherein the through holes are arranged in a matrix pattern, the first and the second staggered patterns are symmetrical with each other.

12. A ground structure of a connector to be mounted to a board, the connector having a first half portion mounted on a first surface of the board and a second half portion mounted on a second surface of the board opposite to the

first surface, the first half portion being adapted to be engaged with and disengaged from a first mating connector, the second half portion being adapted to be engaged with and disengaged from a second mating connector,

each of the first and the second half portions comprising:

a housing;

a plurality of vertical ground plates held by the housing; and

a plurality of horizontal ground plates held by the housing and intersecting with the vertical ground plates in a lattice fashion,

the vertical and the horizontal ground plates having a plurality of terminal portions press-fitted into a plurality of through holes formed on the boards to be arranged in a staggered pattern,

the first and the second half portions being provided with a plurality of signal contacts inserted through a plurality of through holes formed on the board,

at least a part of the signal contacts being surrounded by the ground plates.

13. The ground structure according to claim 12, wherein a plurality of spring portions are formed at front ends of the terminal portions of the ground plates in the first and the second half portions or formed on plate portions of the ground plates, the spring portions of one of the first and the second half portions being brought into contact with the ground plates or the front ends of the terminal portions in the other of the first and the second half portions.

14. The ground structure according to claim 12, wherein the ground plates in the first and the second half portions are provided with a plurality of recesses so that front ends of the terminal portions of one of the first and the second half portions enter into the recesses of the other of the first and the second half portions.